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Economic & Environmental Analysis Conference Baltimore, Maryland – April 2004

Revisions to Deep-Draft Vessel Operating Costs Research for Review and Revision of Supporting Methodologies

April 2004

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Waterborne Deep-Draft Vessel Operating Costs Revisions and Directives for Review of Methodologies

Economic & Environmental Analysis Conference

Baltimore, Maryland

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Waterborne Navigation

- Presenter
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Waterborne Navigation

- Revisions to Vessel Operating Costs (VOCs)
  - ***Why?*** → Recent scrutiny brought forth by the Government Accounting Office (GAO) and the National Academy of Sciences (NAS) has resulted in requirements for greater “transparency” of study processes and additional requirements for external and independent review(s).

Waterborne Navigation

- Revisions to Vessel Operating Costs (VOCs)
  - ***Why?*** → Practice of evolving study requirements has resulted in concerns over procedures for derivation of costs (i.e., resource versus amortized or accounting costs for hull assets, etc.) and recent review and research of industry information also indicates cost structures may need to be revised in method. In addition, USACE aggregate costs are being increasingly used by entities outside of USACE and the underlying methods, assumptions, and limitations need to be verified and documented.

Waterborne Navigation

- Revisions to Vessel Operating Costs (VOCs)
  - Pending further review of cost procedures, the primary concern of external reviewers is that vessel operating costs should be more reflective of *economic resource* costs as opposed to purely or largely accounting or financial costs.

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- Revisions to Vessel Operating Costs (VOCs)
  - Research is in-process to review the general methodologies or approach by which costs are derived. Potential adjustment(s) to costs will be undertaken in two stages:
    - General adjustments which are readily performed with available information (periods for amortization and moving average for capital costs, etc.)
    - Adjustments which require research to better quantify applicable estimates (i.e., composition of new versus secondary hull pricing, relative weights for bunkerage costs , etc.)

Waterborne Navigation

- Revisions to Vessel Operating Costs (VOCs)
  - Inputs under currently identified for revision ***(general adjustments)***
    - Accounting\Financial Amortization versus resource costs for hull acquisition.
    - Hull service life (twenty years versus 25 or more years, etc.).
    - Period for moving average applied for vessel hull cost (employment of other than a ten-year moving average for hull pricing or replacement costs, alternatively seven to eight years).
    - Consideration of breakage\scrappage of hulls.
    - Changes to bunkerage costs based on relative weight of consumption and by region of shipping (including more ports sampled).

Waterborne Navigation

- Revisions to Vessel Operating Costs (VOCs)

  (continued)

  - Inputs under consideration for revision ***(requires specific research)***
    - Capital cost of container utilization (for waterborne versus other intermodal service.
    - Secondary market\acquisition hull pricing.
    - Tracking of price\rate structure or volatility (bottom threshold spread).

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- Summary of Findings for Initial Vessel Operating Cost Review:
  - Review of aggregate vessel operating costs indicated currently available estimates (i.e. FY 2002) were overestimated by as much as 5% to 10% percent to as much as nearly 20% to 30% (excluding allowances for bunkerage; depending on vessel type, DWT class and registry).
  - Bunkerage costs are currently at high levels and have\will somewhat offset changes that will be made to other components of operating costs.

Waterborne Navigation

- Summary of Findings for Initial Vessel Operating Cost Review:
  - Capital Costs alone are high a margin of 10% to nearly 40%.
  - Accounting for breakage or scrapping has had minimal impact to lessening of costs (less than 1% to 2%)
  - Insurance (P&I) determined to slightly overstated (3% to 6%).
  - Other cost components, notably labor-related, continue to increase (i.e., crew\manning and administration, etc.).

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- Projected Timeframe for Realignment of Vessel Operating Cost Structures:
  - Approximately two to three years while employing limits or “caps” for change ranging from 5% to 8%

Waterborne Navigation

- Revisions to Vessel Operating Costs (VOCs)
  - A written manual or primer for aggregate vessel operating costs will also be produced (approximately end of CY 2004\early CY 2005) as a product of the cost methodology review *(to clarify guidance on some of the limitations and applications for costs, and to also provide guidance for how cost may be adjusted where circumstance warrants.)*.

Waterborne Navigation

- Potential Additions to AggregateVessel Operating Cost Structure(s):
  - Consideration for detailed compilation versus index adjustment for similar type of carriers
    - Roll On\Roll Off (and Vehicles) Carriers
    - Chemical Products Tankers
    - Gaseous Tankers
    - Other?

- ***Open Period for Discussion/Questions***

- ***END***